

Amendments to the Claims:

This list of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A film directly deposited on a non-seed layer substrate consisting essentially of IrMnN having a (200) texture.

Claim 2 (original): The film of Claim 1, wherein the IrMnN comprises from about 2 to about 78 atomic percent Ir, and from about 16 to about 96 atomic percent Mn.

Claim 3 (original): The film of Claim 1, wherein the IrMnN comprises from about 14 to about 23 atomic percent Ir, and from about 69 to about 83 atomic percent Mn.

Claim 4 (original): The film of Claim 1, wherein the IrMnN comprises from about 1 to about 20 atomic percent N.

Claim 5 (original): The film of Claim 1, wherein the IrMnN comprises from about 2 to about 10 atomic percent N.

Claim 6 (original): The film of Claim 1, wherein the film has thickness of from about 5 to about 20 nm.

Claim 7 (original): The film of Claim 1, wherein the film is an exchange biasing layer.

Claim 8 (original): The film of Claim 1, wherein the film is a seed layer.

Claim 9 (currently amended): A layered magnetic structure comprising:

a non-seed layer substrate;

a layer consisting essentially of IrMnN having a (200) texture directly deposited on the substrate; and

a ferromagnetic layer deposited on the IrMnN layer, wherein the structure has a blocking temperature of greater than 300°C.

Claim 10 (canceled)

Claim 11 (original): The layered magnetic structure of Claim 9, wherein the IrMnN comprises from about 2 to about 78 atomic percent Ir, and from about 16 to about 96 atomic percent Mn.

Claim 12 (original): The layered magnetic structure of Claim 9, wherein the IrMnN comprises from about 1 to about 20 atomic percent N.

Claim 13 (original): The layered magnetic structure of Claim 9, wherein the film has thickness of from about 5 to about 20 nm.

Claim 14 (original): The layered magnetic structure of Claim 9, wherein the structure comprises a plurality of the IrMnN layers.

Claim 15 (original): The layered magnetic structure of Claim 9, wherein the structure comprises a plurality of the ferromagnetic layers.

Claim 16 (original): The layered magnetic structure of Claim 9, wherein the structure comprises from 2 to 40 of the IrMnN layers, and from 2 to 40 of the ferromagnetic layers.

Claim 17 (original): The layered magnetic structure of Claim 9, wherein the IrMnN layer is a seed layer for the ferromagnetic layer.

Claim 18 (original): The layered magnetic structure of Claim 9, wherein the IrMnN and ferromagnetic layers are exchange coupled.

Claim 19 (previously presented): The layered magnetic structure of Claim 9, wherein the IrMnN layer is deposited on a substrate.

Claim 20 (original): A soft magnetic underlayer of a perpendicular magnetic recording media comprising the layered magnetic structure of Claim 9.

Claim 21 (original): A spin valve sensor including a pinning layer comprising the layered magnetic structure of Claim 9.

Claim 22 (withdrawn): A method of making an IrMnN film comprising depositing Ir and Mn on a substrate in the presence of a reactive nitrogen-containing atmosphere.

Claim 23 (withdrawn): The method of Claim 22, wherein the reactive nitrogen-containing atmosphere comprises from about 1 to about 50 volume percent N₂.

Claim 24 (withdrawn): The method of Claim 22, wherein the reactive nitrogen-containing atmosphere comprises from about 2 to about 20 volume percent N₂.

Claim 25 (withdrawn): The method of Claim 23, wherein the nitrogen-containing atmosphere comprises from about 50 to about 99 volume percent of at least one inert gas.

Claim 26 (withdrawn): The method of Claim 25, wherein the inert gas comprises argon.

Claim 27 (withdrawn): The method of Claim 22, wherein the nitrogen-containing atmosphere is at room temperature.

Claim 28 (withdrawn): The method of Claim 22, wherein the IrMnN film is deposited by reactive sputtering.

Claim 29 (withdrawn): The method of Claim 28, wherein the Ir and Mn are provided in elemental form.

Claim 30 (withdrawn): The method of Claim 28, wherein the Ir and Mn are provided as an alloy.

Claim 31 (withdrawn): The method of Claim 30, wherein the alloy comprises from about 2 to about 78 atomic percent Ir, and from about 16 to about 96 atomic percent Mn.

Claim 32 (withdrawn): The method of Claim 22, wherein the IrMnN film has a (200) texture.

Claim 33 (withdrawn): A method of making an IrMnN film comprising depositing the IrMnN film on a substrate, wherein the IrMnN film has a (200) texture.

Claim 34 (currently amended): A method of making a layered magnetic structure comprising:

directly depositing a layer consisting essentially of IrMnN having a (200) texture on a non-seed layer substrate; and

depositing a ferromagnetic layer on the IrMnN layer, wherein the structure has a blocking temperature of greater than 300°C.

Claim 35 (canceled)

Claim 36 (original): The method of Claim 34, wherein the IrMnN layer is a seed layer for the ferromagnetic layer.

Claim 37 (original): The method of Claim 34, wherein the IrMnN and ferromagnetic layers are exchange coupled.